

WHITE-TAILED DEER

Bill Jensen, Big Game Management Biologist, Bismarck

Winter 1987-88 was one of the mildest on record. A total of 64,125 licenses were allocated for the regular gun season, resulting in an estimated harvest of 41,190 white-tailed deer and 4,639 mule deer. Overall, hunter success averaged 74 percent.

At that time there were split seasons in hunting units 2B, 2C and 3C. The archery season ran from September 2 to December 31, with a four-day closure during the gun season. A total of 9,565 resident and 270 nonresident archery licenses were sold in 1988. Archery hunter success was about 34 percent, with an estimated 2,868 white-tailed deer and 288 mule deer harvested.

The 6 ½-day muzzleloader season was split between November 25-28 and December 2-5 (Note: Legislation that originally established the muzzleloader season has always required that it start after the regular deer gun season). The number of muzzleloader licenses available consisted of 125 antlered and 375 antlerless white-tailed deer (482 licenses were actually issued). Muzzleloader hunters harvested 36 antlered and 162 antlerless white-tailed deer for 41 percent hunter success.

This fall, North Dakota will make available up to 149,400 deer licenses for the regular deer gun season. Although this is another record number of licenses, it is an increase of just 850 from 2007. This year archery license sales may top the 20,000 mark with more than 17,000 resident and perhaps 3,000 nonresident archery licenses issued. In 2008, 1,408 antlered and 1,408 antlerless white-tailed deer licenses will be available to muzzleloader hunters. Hunter success for these two seasons should continue to be 40 percent or higher.

Management goals have been reached for units in the southeastern and northwestern portions of the state, but deer numbers remain high for other hunting units, particularly in northeastern and extreme southwestern portions of North Dakota.

In 2003, Game and Fish Department officials began considering a special doe season. At that time, it was felt that it would be best to exhaust all other alternatives within the traditional season framework before adding a new season. This year there will be a special September antlerless deer gun season for units 2C and 2D in northeastern North Dakota, running from September 26 through October 2. The goal is to dramatically reduce deer numbers in these units and return to traditional season dates as soon as possible.

Harvesting antlerless deer is not just an opportunity to fill the freezer; it is the most essential component of deer management. Hunters will have ample opportunities this fall to assist in managing North Dakota's deer herd.

In a state that's only about 4 percent forested, the lowest in the United States, escape cover is limited. CRP has changed that, providing deer and their young additional hiding cover from predators and hunters. From 1980-89, North Dakota deer gun hunters annually harvested about 45,000 deer. In recent years, annual harvest has been about 100,000 deer. Mild winters and several other factors have contributed to this increase, but CRP has played an important role.

During severe winters, deer seek warmer thermal cover to escape bitter winds. Without specifically designed research it is difficult to quantify the relative importance of CRP and cattail marshes as thermal cover for wintering deer. Even so, it's interesting to note that while conducting aerial surveys during past winters on very cold days, Department big game biologists frequently noted larger numbers of deer bedded down on the leeward sides of hills in CRP fields. We can only imagine that when temperatures are minus 20 degrees Fahrenheit and colder, finding a field of tall vegetation that stops ground drifting and breaks the wind is a modest, yet welcome comfort for a deer.





JARED SPRENGER

MULE DEER

Bruce Stillings, Big Game Management Biologist, Dickinson

Nearly 1,500 antlered white-tailed deer muzzleloader licenses were made available to hunters this fall. This whitetail was shot during the 2007 muzzleloader season by Patrick Isakson, Bismarck.

Mule deer populations in western North Dakota are doing better today than 20 years ago.

Following a mild winter in 1988, and an extremely dry summer, the spring population index in the badlands was 5.7 mule deer per square mile, with 41 bucks per 100 does and 109 fawns per 100 does.

Currently, North Dakota's mule deer population in the badlands remains healthy. The 2008 spring population index was 9.1 deer per square mile. This is 38 percent higher than the long-term average. According to the 2007 fall demographic survey, the buck-to-doe ratio is healthy at nearly 40 bucks per 100 does, but production was slightly below average at 88 fawns per 100 does.

More than 5,100 mule deer licenses were issued for the 1988 season, with hunter success at 76 percent for bucks and 93 percent for does. In the Slope management region (hunting units 3D1, 3D2, 3E1, 3E2, 3F1, and 3F2), 3,025 any-deer licenses were issued, and 956 mule deer were harvested.

Mule deer in the Slope management region have dramatically increased since 1988. Last fall, 2,697 mule deer were harvested, or nearly 1,750 more than 1988. Undoubtedly, CRP, by providing a permanent grassland component on the landscape, has benefited mule deer in their secondary range outside the badlands. Yet, it seems likely that mule deer numbers will decline in areas outside the badlands as CRP is removed from the landscape.

Although Western states have experienced a decline in mule deer numbers over the last 20



MIKE ANDERSON

A mule deer buck license in the badlands remains a coveted draw for hunters.

years, mule deer populations on the Northern Plains have been on the rise. However, this does not mean North Dakota's mule deer are immune from pressures causing declines throughout the West. Fire suppression, livestock grazing, oil/gas development, urban development, and exotic species invasions are all issues relevant in North Dakota's badlands and need to be monitored to maintain healthy habitat for mule deer.

Mule deer are at or above management objectives in all badlands units, which means more hunting opportunities. This fall, 8,600 mule deer licenses will be issued, or 250 more than last year, and 3,450 more than in 1988. Hunters will also see increased hunting opportunities outside the badlands this year, as 6,250 any-deer licenses (1,800 any-antlered and 4,450 any-antlerless) are available in the Slope region.

PRONGHORN

Bruce Stillings

The 1988 summer aerial survey produced a statewide pronghorn population estimate of 7,218 animals. That fall, the Department issued 1,468 gun licenses, resulting in a 90 percent hunter success rate during the 23 ½-day season. A split season was used in units 4A and 4B, located in the southwestern corner of the state. The bow season was open in the western part of the state, as well as Dickey, McIntosh and Sargent counties.

Twenty years later, pronghorn on the eastern extent of their range remain at a healthy level. Following the brutal winter of 1996-97, 10 years of mild winters allowed the pronghorn population to rebound on the Northern Plains. To reduce pronghorn numbers to population objectives, the Department issued a record number of licenses in 2007. July aerial surveys indicated the reduction was successful. Statewide pronghorn numbers were down 7 percent, with the most notable decreases in the southern badlands (19 percent) and northern badlands (27 percent).

Hunters will still have plenty of opportunities to pursue this unique big game animal, as 2,141 any-pronghorn and 2,490 doe/fawn licenses are available for the 2008 gun season. Although this is 2,284 fewer licenses than last year, the last five years have provided more gun hunting opportunities than any other five-year period since the first season in 1951.

Pronghorn have increased across their entire range in North Dakota compared to 1988. The most dramatic increase was in the state's secondary pronghorn range east of the badlands in the Slope management region.

In 1988, the number of pronghorn in the Slope management region was estimated at 2,191 animals. In 2008, following 20 years of CRP, the population was estimated at 6,759. No hard evidence exists to support the claim that CRP aided in the pronghorn rebound on the secondary range. Even so, it's understood that a permanent grassland component, which provides a nutritious food source, benefits the species.

It seems likely that pronghorn numbers, like mule deer, will begin decreasing in areas outside the badlands as CRP is removed from the landscape.

MOOSE

Roger Johnson, Big Game Management Supervisor, Devils Lake

While the number of moose licenses in North Dakota has not changed significantly over the years – 130 licenses were available in 1987 – distribution of these large animals has changed.

In 1987, all of North Dakota's moose were located in the north central and eastern third of the state. Today, moose are distributed over three-quarters of the state and are expanding their range south and west.

North Dakota's 2008 moose season features 142 licenses, compared to 146 license holders in 2007.

Snow conditions in 2007-08 allowed for a moose survey of only

the Turtle Mountains in the state's northern tier. The survey indicated a decline in moose numbers in that area, but increases in the northwestern part of the state have allowed for moose permit numbers to remain relatively stable.

Because of continued low moose numbers in the Pembina Hills area, unit M1C will be closed in 2008 to help increase the population. Moose permits in M10 were again increased, from 40 to 45, to stabilize increasing moose numbers in this area of the state north and west of Minot. Reports of moose sightings along the Missouri River and in the Williston area continue.

The expansion of moose across the state will most likely mean expanded hunting opportunities in the future. To help determine the cause of declines in moose in timbered areas, the Game and Fish Department is helping fund a research project with the University of North Dakota. Results from this study are expected in fall, and should help big game biologists better manage this unique species in North Dakota.

ELK

Roger Johnson

Elk in North Dakota have come a long ways. Twenty years ago, one unit, E2 in the Killdeer area, was open to elk hunting. Seventy permits were available and hunters harvested 46 elk.

The Pembina Hills also had elk, but no season was held in 1987. In 1988, 26 elk were counted in the Pembina Hills, the highest count for that area to that point.

There are a number of changes for the 2008 elk season. A total of 561 elk licenses are available, an increase of 140 licenses from 2007. Unit E1 – northeastern part of the state – is open for both antlered and antlerless elk in 2008, with an increase of 20 permits, although the December portion of the E1 season is for antlerless elk only. In an attempt to reduce the number of elk outside Theodore Roosevelt National Park, 80 more licenses are available in E3 and 70 more in E4. There will also be a November and December season in these two units.

Changes in E3 and E4 are based on increased elk sightings during the Department's mule deer surveys, National Park Service data collected on radio-collared elk and local observations. There is also increased concern from local landowners about the number of elk.

Elk surveys in both the Pembina Hills and Killdeer Mountains were completed in 2007-08 and the numbers remain within management goals and tolerable limits of landowners in these areas.

The 2007 harvest indicated 435 licensed hunters harvested 255 elk for a 61 percent success rate. Work continues by the Theodore Roosevelt National Park science team to formulate an environment assessment plan for controlling elk numbers in the park.

BIGHORN SHEEP

Brett Wiedmann, Big Game Management Biologist, Dickinson

"We are where we were" may be the best way to describe North Dakota's bighorn sheep population when comparing 2008 to 1988. Twenty years ago the state had approximately 300 bighorns, but that number was reduced to about 100 animals during the late-1990s due to a major die-off in the southern badlands.



Today, however, bighorn sheep numbers again total more than 300 animals, thanks to several successful instate and out-of-state transplants, good lamb recruitment the last several years, mild winters, and a new management strategy that focuses on lower population densities with a greater distribution of bighorns throughout the badlands. Previously, the Department managed fewer herds containing higher population densities, which ultimately made the populations more susceptible to disease.

One significant change since 1988 is additional interest by North Dakotans to hunt bighorn sheep, as there were only 3,467 applicants in 1988 compared to a record 10,400 in 2008. That's an increase of 200 percent.

North Dakota's six bighorn sheep license holders should have good hunting opportunities in 2008 as they pursue mature rams through the state's rugged badlands. Like in 2007, the Department issued five licenses through the lottery and one by auction, which generated \$35,000 for bighorn management in North Dakota.

Early indications are that 2008 could be another excellent year for lamb recruitment, as a mild winter and opportune rains have been conducive to robust lamb production. Especially encouraging has been the exceptional lambing success of the bighorns relocated to the state from Montana's Missouri River Breaks in 2006 and 2007.

The U.S. Forest Service, Bureau of Land Management and Minnesota-Wisconsin Chapter of the Foundation for North American Wild Sheep collaborated with the Department in January to transplant two groups of sheep within the state to increase genetic diversity in the northern and southern badlands.

The state's bighorn sheep population had a minimum of 282 animals in 2007, an increase of 9 percent over the 2006 count and 34 percent above the five-year average. An additional 20-30 bighorns also inhabit the North Unit of Theodore Roosevelt National Park.



CRAIG BIRNLE

North Dakota's elk numbers have climbed in the last two decades.